TITLE 7 HEALTH

CHAPTER 18 SWIMMING POOLS

PART 3 PUBLIC SWIMMING POOLS, SPAS AND BATHS: DESIGN AND CONSTRUCTION

7.18.3.1 ISSUING AGENCY: New Mexico Environmental Improvement Board.

[7.18.3.1 NMAC - Rp, 7.18.3.1 NMAC, 07/30/08]

7.18.3.2 SCOPE: Owners and operators of public swimming pools, public spas, public baths, or other public bathing attractions.

[7.18.3.2 NMAC - Rp, 7.18.3.2 NMAC, 07/30/08]

7.18.3.3 STATUTORY AUTHORITY: NMSA 1978, Sections 74-1-1 through 74-1-16.

[7.18.3.3 NMAC - Rp, 7.18.3.3 NMAC, 07/30/08]

7.18.3.4 DURATION: Permanent.

[7.18.3.4 NMAC - Rp, 7.18.3.4 NMAC, 07/30/08]

7.18.3.5 EFFECTIVE DATE: 07/30/08, unless a later date is cited at the end of a section.

[7.18.3.5 NMAC - Rp, 7.18.3.5 NMAC, 07/30/08]

7.18.3.6 OBJECTIVE: To protect the public health and safety by establishing standards and provisions for the regulation of public swimming pools, spas, baths, and other public bathing attractions.

[7.18.3.6 NMAC - Rp, 7.18.3.6 NMAC, 07/30/08]

7.18.3.7 DEFINITIONS: Unless otherwise defined in the public swimming pool rules, the words and phrases used in this rule have the same meanings as in 7.18.2.7 NMAC, Public Swimming Pools, Spas and Baths: General Provisions.

[7.18.3.7 NMAC - Rp, 7.18.3.7 NMAC, 07/30/08]

7.18.3.8 ADOPTION BY REFERENCE: Outside standards, listings and publications referenced in this regulation are incorporated as part of this regulation.

[7.18.3.8 NMAC - Rp, 7.18.3.8 NMAC, 07/30/08]

7.18.3.9 ENFORCEMENT AUTHORITY:

- **A.** Private pools shall not be subject to the provisions of this rule or to 7.18.2 through 7.18.5 NMAC.
- **B.** Department representatives shall be responsible for the enforcement of this regulation.

[7.18.3.9 NMAC - Rp, 7.18.3.9 NMAC, 07/30/08]

7.18.3.10 GENERAL AND STRUCTURAL DESIGN:

- **A.** Public pools and all appurtenances shall be constructed of materials that:
 - (1) are nontoxic to humans and the environment;
 - (2) are impervious and durable;
 - (3) will withstand design stresses, and
- (4) will provide a watertight structure with a smooth and easily cleanable surface without cracks or joints, excluding structural joints.
- **B.** The department may require demonstration of structural integrity from a structural engineer licensed in the state of New Mexico.
- C. The structural design and materials used for public pools shall be in accordance with the rules, regulations and generally accepted industry engineering practices and methods prevailing at the time of original construction.
- **D.** The interior surfaces of a public pool or bath that are filled with or designed to contain water shall not be made of wood. The provisions of this subsection shall apply to public pools or baths constructed or modified after the effective date of these rules.
- **E.** Equipment for a public pool including, but not limited to, pumps, filters, skimmers and chemical feeders shall be NSF/ANSI 50 certified. Pool equipment shall bear the mark of an ANSI-accredited, independent,

third party conformity assessment organization such as the NSF, underwriters laboratories, inc. (UL), edison testing laboratories (ETL) or other organizations acceptable to the department.

- F. The use of earth to finish the interior surface of the public pool, which is filled with or designed to contain water, is prohibited. Washed sand or other department-approved material, if applied to create a beach pool environment shall only be applied over an impervious interior public pool surface. The interior material shall be appropriate for pool use, and controlled to not adversely affect the proper filtration, disinfection, maintenance, safety, sanitation, water clarity and operation of the pool. If washed sand or department approved material is used, positive up flow circulation through the material shall be provided as necessary to assure that sanitary conditions are maintained at all times.
- **G.** The colors, patterns, or finishes of the interior surfaces that contain water shall not obscure the existence or presence of objects or surfaces within the public pool or bath. All new public pool interior finishes shall be white or lightly colored except for:
 - (1) decorative wall tiles and depth markings when such tiles are installed at the top of the pool wall;
 - (2) racing lane markings (painted or tiled, maximum twelve inches wide);
 - (3) turn targets;
 - (4) safety markers; and,
 - (5) other decorative items as approved by the department.
- **H.** A hydrostatic relief valve or a more extensive hydrostatic relief system shall be installed if necessary to prevent ground water pressure from displacing or otherwise damaging a pool or spa.
- **I.** The surfaces within a pool, intended to provide footing for users, shall have a slip-resistant surface to reduce the chance of a fall.
 - (1) The roughness or irregularity of such surfaces shall not cause injury to the feet during normal use.
 - (2) Decorative floor tiles shall be sized, installed and maintained so as to not create a safety hazard.
- **J.** Roofs or canopies over pools shall be constructed so that water run-off, dirt, debris, or other forms of pollution do not drain or fall into the pool.
- **K.** All plumbing shall be sized, installed and maintained according to applicable state regulations and local plumbing codes. Pool owners and operators shall provide the department with written evidence of compliance with all plumbing codes from a licensed plumbing inspector.
- L. All electrical wiring, equipment and installation, including the grounding of pool components shall conform to all applicable state regulations and local electrical codes. Pool owners and operators shall provide the department with written evidence of compliance with all electrical codes from a licensed electrical inspector.
- **M.** Any public pool that is designed or used for more than one use or classification as defined by the public swimming pool rules, 7.18.2 through 7.18.5 NMAC, shall comply with the most stringent requirements in the public swimming pool rules.
- N. Public pools shall comply with Title 42, Sections 12101 et. seq. of the United States Code, the Americans with Disabilities Act.
- **O.** When a public pool, spa or bath is modified it shall comply with the provisions of the public swimming pool rules', 7.18.2 through 7.18.5 NMAC, unless otherwise specified in these rules. [7.18.3.10 NMAC Rp, 7.18.3.10 NMAC, 07/30/08]

7.18.3.11 DIMENSIONS:

- **A.** This section shall apply to all new construction and public pools where the interior wall surface or bottom of the public pool is being modified. Existing pools shall comply with the provision in effect at the time of original construction or the rule in effect at the time of the modification, whichever is more stringent.
- **B.** Public pools shall have no sharp edges or protrusions where walls meet at an acute angle. Public pools shall be shaped to provide for complete water recirculation and mixing.
 - C. There shall be no interior walls, ledges or curbs within the perimeter walls of a public pool.
- **D.** The inside wall surface of a pool shall be vertical, except where coved construction is used between the sidewalls and the bottom of the pool.
- (1) In coved construction, the radius of curvature in an area less than five feet deep shall not exceed six inches at a depth of three feet six inches and shall not exceed two feet at a depth of five feet or greater.
 - (2) There shall be a uniform transition in the cove throughout all depths of the pool.
- **E.** The slope of the bottom of any part of the pool shall not be more than one foot of fall for every twelve horizontal feet where the water depth is no more than five feet and the slope shall be constant throughout. Floor slopes in the transition area between the deep and shallow portions of the pool shall not exceed one foot of fall in three horizontal feet.

7.18.3.12 MARKINGS AND LIFELINES:

- **A.** A lifeline shall be provided two feet into the shallow portion of the pool from the break in grade between the deep and shallow portions of the pool. A lifeline is not required where there is a uniform slope.
- (1) The lifeline shall be securely fastened to wall anchors. Wall anchors shall be of corrosion-resistant materials and shall be recessed or have no projections which constitute safety hazards when the lifeline is removed.
 - (2) The lifeline shall be marked with visible floats at no greater than two foot intervals.
- (3) The line shall be of sufficient size and strength to offer a good handhold and to support loads normally imposed by bathers;
- (4) The lifeline shall remain in place except when pool use is restricted to lap swimming by competent swimmers or to supervised swimming instruction.
- **B.** The break in grade of the pool bottom shall be marked with a four inch minimum width of floor tile or painted stripe of a color contrasting with the bottom, for the entire width of the pool. Where there is a uniform slope, a stripe is not required.
- C. The depth of water (in feet) shall be plainly and conspicuously marked above or at water level on the vertical pool wall except for splash-out (deck level overflow) pools and on the top of the coping or edge of the walk within eighteen inches of the water edge. Depth markers shall be placed on each side and on each end of a pool.
- (1) Depth markers shall be placed at the maximum and minimum depth points and at one foot depth increments in between the minimum and maximum depth points.
 - (2) Depth markings shall be spaced at no more than fifteen foot intervals.
 - (3) Pools shall have depth markings at slope breaks.
- (4) Depth markings shall be at least four inches in height and of a color contrasting with the background.
 - **D.** Public spa pools with a uniform maximum depth shall have the maximum water depth indicated.
- (1) Public spa pools providing perimeter seating shall have contrasting permanent marking no less than two inches wide on the top surface along the front leading edge of the bench.
- (2) Public spa pools shall have depth markers spaced at no more than ten foot intervals, but in no case fewer than two depth markers per spa, regardless of the spa size or shape.
- **E.** Non-slip markers, with the words "No Diving" shall be placed between the depth markers on the walkway where the water depth is less than five feet at a public pool other than a spa pool or a wading pool. "No Diving" symbols that are not less than four inches high shall be placed on the walkway together with "No Diving" markers. Other locations for symbols and markers may be approved by the department. [7.18.3.12 NMAC Rp, 7.18.3.12 NMAC, 07/30/08]

7.18.3.13 LIGHTING:

- **A.** Sufficient lighting shall be provided to ensure visibility of all portions of the pool, including the bottom, at all times. Owners shall provide protective shielding for all lighting fixtures above walking surfaces and pool areas.
- **B.** All public pools shall have underwater lighting of not less than 0.5 watts per square foot of pool water surface area.
- C. Area lighting shall provide a minimum of three (3) foot candles of illumination level at the water surface and the deck. Area lighting shall be directed to minimize glare on the pool water surface. If the pool is closed after dark, the illumination level is permitted to be lowered to no less than 3 foot-candles.
- **D.** For pools built prior to the effective date of the rules and where underwater lighting is not employed, the pool water surface and the adjacent deck area shall have an illumination of no less than fifteen (15) foot candles. If the pool is closed after dark, the illumination level is permitted to be lowered to no less than 3 foot-candles.

[7.18.3.13 NMAC - Rp, 7.18.3.13 NMAC, 07/30/08]

7.18.3.14 INDOOR POOL VENTILATION:

- **A.** Ventilation shall be provided for indoor public pools to minimize condensation and odors.
- **B.** All newly constructed and modified indoor public pools, except class D public pools, shall be

constructed, equipped and operated to maintain relative humidity levels between forty and sixty percent at all times. Existing indoor public pools and baths shall maintain a minimum of four air changes per hour.

- C. For public pools and baths constructed prior to the effective date of the rules, the indoor public pool area shall be ventilated to the outside without returning air to the central heating system, or air shall be recirculated through a dehumidifying system. If water is separated from the air for re-use in the pool, it shall be returned via the circulation filtration system prior to entering the pool.
- **D.** For all indoor public pools or hot springs public baths, the building ventilation system shall prevent air in the bathroom from drifting or flowing into other areas and the exhaust air from the indoor public pool area shall not be vented to any ancillary facility.
- **E.** The department may require indoor public pools to install a relative humidity transmitter, or an approved equivalent, to monitor the relative humidity. [7.18.3.14 NMAC Rp, 7.18.3.14, 07/30/08]

7.18.3.15 LADDERS, RECESSED STEPS, STAIRWAYS AND RAMPS:

- **A.** All public pools, except for spray pads or wading pools, shall have a ladder, set of recessed steps or stairs located at fifty foot intervals around the pool perimeter.
- **B.** There shall be at least one set of stairs at the shallow end of the pool, except in zero depth pools, and pools exclusively used for competition events, wading pools, or spas less than twenty-four inches deep.
- C. Pools greater than thirty feet in width shall provide recessed steps, ladders or stairs on both sides of the deep area. There shall be at least one stairway at the shallow end of the pool. Ladders may be provided in lieu of stairs in pools where depth is five feet or greater.
 - **D.** Ladder treads, recessed step surfaces and stairs shall have slip-resistant surfaces.
- (1) Ladders and recessed steps shall have two handrails. The outside diameter of the ladder rail shall be between one inch and two inches.
 - (2) Stairs shall have at least one handrail accessible from all points on the stairs.
- (3) There shall be a clearance of not more than five inches or less than three inches between the ladder and the pool wall below the water line.
- **E.** If recessed steps are provided, they shall be easy to clean and shall drain into the pool to prevent the accumulation of dirt. Recessed steps shall have a minimum tread of five inches and a minimum width of fourteen inches.
 - **F.** Ladders, recessed steps and stairways shall be located to not interfere with racing lanes.
- **G.** Stair treads shall have a minimum unobstructed horizontal tread depth of ten inches and a minimum unobstructed surface area of two hundred forty square inches.
- **H.** Riser heights on steps shall be between seven and twelve inches and shall be uniform throughout except for the bottom riser when used as a bench or seat.
- I. Except for spa pools, steps for entering or leaving the pool shall be a minimum of four feet wide, unless corner or circular steps are used. If corner or circular steps are used, the maximum radius of the bottom steps shall be forty-two inches, but no projection shall create a safety hazard.
- **J.** The outer two inches edge of the stair tread shall be constructed of a material that contrasts with the color of the stairs and is clearly visible to bathers.
- **K.** A side handrail extending up and above and returning to the horizontal surface of the pool deck, curb or coping shall be provided at each side of each ladder or set of recessed steps.
- **L.** The leading edge of the handrail shall be no more than eighteen inches, plus or minus three inches, horizontally from the vertical plane of the bottom riser, where applicable.
 - **M.** Ramp entry into the pool shall meet the following requirements.
- (1) Handrails shall extend over the deck edge and extend to the bottom of the ramp for entering and leaving the pool.
- (2) Ramp edges protruding into the pool shall be of a contrasting color. [7.18.3.15 NMAC Rp, 7.18.3.15 NMAC, 07/30/08]

7.18.3.16 SPECIAL DESIGN FEATURES:

- **A.** If waterfalls or rockery are installed at a public pool, the following requirements shall apply.
- (1) If waterfalls or rockery are to be installed at or adjacent to a pool and the height of the feature is twelve inches or less above the water level of the pool:
 - (a) waterfalls may spill directly into the pool from the side wall;

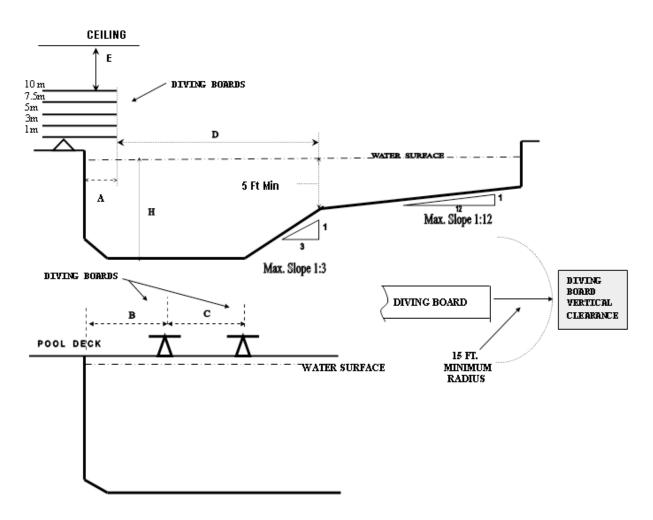
- **(b)** rockery shall come no closer than four feet from the edge of the pool, at pools that are not required to have lifeguards; or
- (c) rockery is allowed up to the pool edge as long as the rockery feature does not cover more than five percent of the pool deck perimeter at pools that are required to have lifeguards.
- (2) If waterfalls or rockery are to be installed at or adjacent to a pool and the height of the feature is greater than 12 inches and less than thirty inches above the water level of the pool:
- (a) waterfalls and rockery shall not be closer that eight feet from the edge of the pool at pools that are not required to have lifeguards; or
- **(b)** waterfalls and rockery are allowed up to the pool edge as long as the waterfall or rockery does not cover more than five percent of the pool deck perimeter at pools that are required to have lifeguards.
- (3) If waterfalls or rockery are to be installed at or adjacent to a pool and the height of the feature is greater than 30 inches above the water level of the pool:
- (a) waterfalls and rockery shall come no closer that fifteen feet from the edge of the pool at pools that are not required to have lifeguards; or
- **(b)** waterfalls and rockery are allowed up to the pool edge as long as the waterfall or rockery does not occupy more than five percent of the pool deck perimeter at pools that are required to have lifeguards.
 - **B.** Plants and vegetations may come no closer than four feet from the edge of the pool.
- C. Where waterfalls are provided at or adjacent to the deep areas of public pools, a minimum four foot wide walkway surrounding it.
- **D.** Waterfalls that commingle with the pool water shall conform to water quality and treatment requirements established for the pool. The department may require additional disinfection capability to address anticipated increased demand for and aerosolization of the disinfectant.
- **E.** Flows shall not create turbulence that may create a safety hazard or reduce visibility in the pool. [7.18.3.16 NMAC Rp, 7.18.3.16 NMAC, 07/30/08]

7.18.3.17 DIVING AREAS:

- **A.** In a public pool where diving and swimming are allowed, the area of the pool where diving is permitted shall be:
 - (1) separated from the main swimming area by a lifeline in rectangular pools; and
- (2) in the case of a T, L or Z shaped pool, in a recessed area forming one of the legs of the T, L or Z, which is separated from the main swimming area by a lifeline.
- **B.** Public pools used for diving shall comply with the following water depths and lateral and vertical clearances.
- (1) Diving areas shall have the minimum dimensions and clearances as specified in 7.18.3.18 and 7.18.3.19 NMAC of this rule.
- (2) The area of vertical clearance, as specified in dimension E in 7.18.3.18 NMAC of this rule, shall be a cylinder with a minimum radius of fifteen feet. The center point of the cylinder shall be located on the edge of the diving end of the diving board, at a point one half of the width of the diving board as specified in 7.18.3.18 NMAC of this rule.
- (3) If the diving areas of the pool are not in compliance with the requirements of this section, the diving facility or equipment shall be removed or be brought into compliance with this section as soon as practical. Any use of the diving areas shall not be permitted until such time as the diving facility or equipment is brought into compliance with this section.

[7.18.3.17 NMAC - Rp, 7.18.3.17 NMAC, 07/30/08]

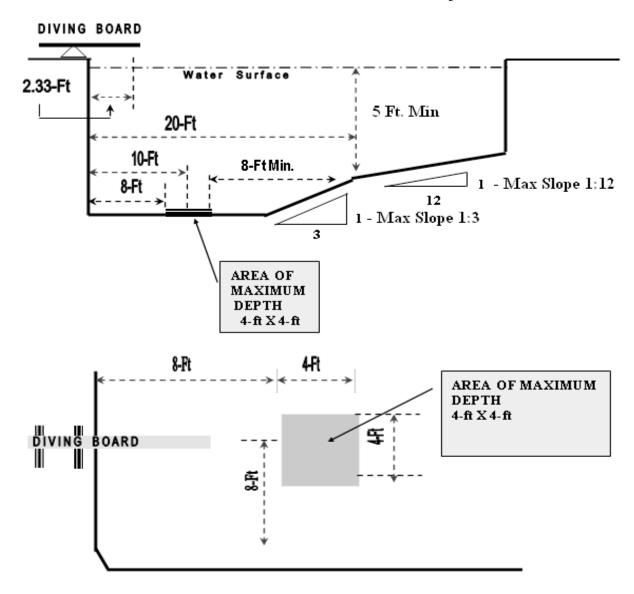
7.18.3.18 DIVING BOARD AND PLATFORM DIMENSIONS AND REQUIREMENTS:



| Diving Board or Platform | A | В | С | D | E | H |
|---|---|-----|----|----|----|----|
| One (1) meter board | 6 | 10 | 10 | 29 | 16 | 12 |
| One (1) meter platform | 4 | 7.5 | 10 | 26 | 10 | 11 |
| Three (3) meter board | 6 | 12 | 10 | 34 | 16 | 13 |
| Three (3) meter platform | 4 | 9.5 | 10 | 31 | 10 | 11 |
| Five (5) meter platform | 5 | 14 | 10 | 34 | 10 | 13 |
| Seven and one half (7.5) meter platform | 5 | 15 | 10 | 36 | 10 | 15 |
| Ten (10) meter platform | 6 | 17 | 12 | 45 | 10 | 17 |

[7.18.3.18 NMAC - Rp, 7.18.3.18 NMAC, 07/30/08]

7.18.3.19 DECK LEVEL DIVING BOARD DIMENSIONS AND REQUIREMENTS:



[7.18.3.19 NMAC - Rp, 7.18.3.19 NMAC, 07/30/08]

7.18.3.20 DIVING EQUIPMENT:

- **A.** Diving boards, towers and platforms in excess of three meters in height shall comply with the dimensional design requirements of the U.S. diving, national federation of state high school associations (NFSHSA) or equivalent standards.
- **B.** Supports for diving equipment, such as platforms, stairs and ladders shall be designed to carry anticipated loads. Stairs and ladders shall be of corrosion-resistant material and easily cleanable with slip-resistant tread.
- C. Diving boards and diving platforms shall be protected with forty-two inch high guardrails and one intermediate rail, both extending at least to the water edge when one meter or more above the water.
- **D.** Diving equipment shall be designed for swimming pool use and shall be installed in accordance with the manufacturer's recommendations.
- **E.** Pool owners and operators shall obtain diving equipment installation instructions and specifications for each unit from the manufacturer and provide it to the department upon request.
 - **F.** A label shall be permanently affixed to the diving equipment and shall include:

- (1) manufacturer's name and address;
- (2) board equipment length;
- (3) identification regarding diving or jump board;
- (4) fulcrum setting specifications (if applicable);
- (5) reference to the current year of the applicable standards; and,
- (6) reference to the applicable articles in the applicable standards.
- **G.** Diving equipment shall have slip-resistant tread surfaces.
- H. Diving equipment shall be permanently anchored to the pool deck.

[7.18.3.20 NMAC - Rp, 7.18.3.20 NMAC, 07/30/08]

7.18.3.21 POOL SLIDES:

- **A.** Pool slides shall comply with the requirements of the U.S. consumer product safety commission safety standards for swimming pool slides as published in the Code of Federal Regulations Vol. 16, Part 1207.
 - **B.** Pool slides shall:
 - (1) be constructed of sturdy and corrosion-resistant material;
 - (2) be securely fastened to the pool deck;
 - (3) have a ladder equipped with slip-resistant treads and rigidly attached handrails;
- (4) have runways which are smooth, of one piece, and free of cutting, pinching, puncturing or abrasion hazards; and
 - (5) have a sliding surface with side rails on both sides that are no less than two inches in height.
 - **C.** Pool slide runways shall be water lubricated when in use.
 - **D.** Pool slides higher than twelve feet above the deck are prohibited.
- **E.** Water depths shall be measured at a point four and one half feet beyond the end of the slide and are based on slide height. The required water depths are as follows:
- (1) a slide that is greater than three feet high to seven and one half feet high shall have a minimum water depth of four feet;
- (2) a slide that is greater than seven and one half feet high to eight feet high shall have a minimum water depth of five feet;
- (3) a slide that is greater than eight feet high to eleven feet high shall have a minimum water depth of five than one-half feet;
- (4) a slide that is greater than eleven feet high to twelve feet high shall have a minimum water depth of six feet.
 - **F.** Pool slides shall be equipped with the warning signs found in 7.18.4.26 NMAC, Required Signs.
- **G.** Portable toddler slides, three feet or less, shall have entry into water depths that are recommended by the manufacturer and approved by the department. Water depths for slide entry are determined by but not limited to platform height, length of slide, and bather weight.

 [7.18.3.21 NMAC Rp, 7.18.3.21 NMAC, 07/30/08]

7.18.3.22 WATERSLIDES:

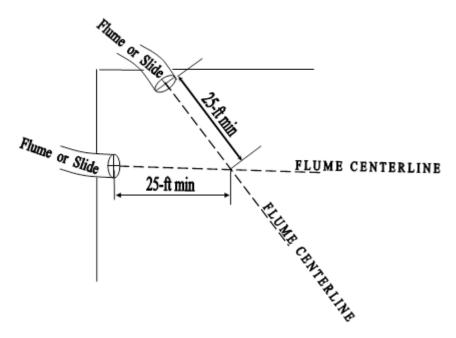
- **A.** A waterslide shall consist of one or more flumes, splash pools or slide runouts, a pump reservoir and facilities for the sanitization, filtration and chemical treatment of the water.
- **B.** The structural design of a water slide and the materials used in its construction shall conform to generally accepted structural engineering practices, and shall provide a sound, durable structure that will safely sustain all applicable loads and pressures. Pool owners and operators shall provide the department, upon request, supporting information and calculations from a New Mexico registered engineer or by a licensed engineer of appropriate competency employed by the designer or manufacturer of the water slide and its structure.
- C. Any components or accessories of a water slide that, under normal conditions of use, come into contact with bathers shall be assembled, arranged and finished so that their external surfaces and edges do not present an injury or hazard to the skin of users under casual contact.
 - **D.** Waterslide surfaces shall be inert, nontoxic, smooth and easily cleaned.
 - **E.** All curves and turns in a flume shall be:
 - (1) designed so that the contact of users with the walls of the flume does not present a hazard;
- (2) constructed so that the forces on the bathers keep them safely inside the flume under all foreseeable circumstances of operation; and
- (3) be designed and constructed so that the speed of the bathers does not reach a point at which a safe equilibrium of dynamic forces cannot be maintained on any curve or turn in the flume.

- **F.** The construction, dimensions and methods of mechanical attachment of a flume shall provide a smooth and continuous surface through the entire length of the flume. Any misalignment of joints in a sectional flume shall not exceed one-sixteenth inch and the upstream side of the joint on the rider's path shall be higher than the downstream side of the joint.
- G. The walls of all flumes shall be designed so that the continuous and combined action of hydrostatic, dynamic and static loads, as well as normal environmental deterioration do not damage the flume bed to the extent of creating a structural failure that presents a hazard of injury to users or that requires unreasonable repairs that may weaken the structural integrity of the flume. Water slides shall be maintained in good operating condition.
- **H.** Runout waterslide exits shall be designed to ensure that bathers enter the slide runout at a safe speed and angle of entry, and shall be designed with adequate length, water depth and slope to bring the user to a safe stop.
 - (1) Flume or slide exits shall be at least six feet apart.
- (2) Waterslide runouts, if used, shall have an exit opening or step, unless one or both of the walls of the run out are not more than sixteen inches in height from the inside or eighteen inches from the outside.
- I. The flume exit of a water slide into a splash pool shall be designed with a slide exit system that provides for safe entry into the splash pool or slide run out. Current practices for safe entry include a water backup, a deceleration distance and body attitude control. Other methods are acceptable as long as safe exit velocities and proper body attitudes are assured under normal use.
- **J.** The distance between the sidewall of the pool and that portion of the flume exit nearest the wall shall not be less than five feet at the point of exit or a greater distance as specified by the manufacturer.
- **K.** The flume and any adjacent parallel flume, exiting to a common pool, shall not be less than six feet apart at the point of exit, as specified in 7.18.3.23 NMAC, or a greater distance if specified by the manufacturer.
- L. The centerline of a flume and the centerline of any adjacent, but non-parallel, flume exiting into a common pool shall not intersect for a distance of twenty five feet from the exit of each of the flumes, as specified in 7.18.3.23 NMAC, Waterslide and Flume Exit Requirements, in this rule.
- **M.** Except as otherwise provided in this subsection, the water depth in a splash pool at the end of the flume exit shall be a minimum of three and one half feet from the normal operating water level to the pool bottom. This depth shall be maintained for a distance of not less than twenty feet from the point of the first obstruction, or not less than thirty feet if the point of exit is even with the normal operating water level. The department may waive these requirements if a special exit system or velocity reduction technique is used that ensures a safe exit from the flume and safe entry to the splash pool.
- **N.** If steps are provided instead of exit ladders, a handrail shall be provided at the steps opposite the point of exit from each flume. Handrails or ladder rails shall not be located in a direct line from the point of exit of the flume or slide.
- **O.** A deck shall be provided along the exit side of the splash pool and along the other two sides of the pool.
- **P.** A concrete walkway, steps, stairway or ramp shall be provided between the splash pool and the top of the flume. The means of access shall:
 - (1) not retain standing water;
 - (2) not be less than three feet wide;
 - (3) have handrails;
 - (4) have a slip-resistant surface; and
- (5) be separated from the waterslide structure by an effective physical separation or located to prevent users from contacting the waterslide structure.

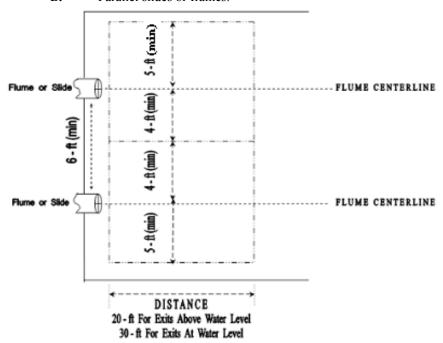
[7.18.3.22 NMAC - Rp, 7.18.3.22 NMAC, 07/30/08]

7.18.3.23 WATERSLIDE AND FLUME EXIT REQUIREMENTS:

A. Intersecting slides or flumes:



B. Parallel slides or flumes:



[7.18.3.23 NMAC - Rp, 7.18.3.23 NMAC, 07/30/08]

7.18.3.24 PUMP RESERVOIRS AND CONTROL OF WATER:

- **A.** Splash pool shall maintain a constant water depth.
- **B.** The interior of pump reservoirs shall be watertight.
- **C.** Pump reservoirs shall be accessible only to authorized persons.
- **D.** Intakes to the slide pumps shall be designed to allow cleaning without danger of trapping the operator.

- **E.** A surge-free automatic water makeup system with a manual override shall be provided and operated so that the normal operating water level of the splash pool is maintained at all times. An approved backflow prevention device shall be provided on makeup water system.
- **F.** The velocity of water at the weir or inlet grate shall not exceed one and one half feet per second. [7.18.3.24 NMAC Rp, 7.18.3.24 NMAC, 07/30/08]

7.18.3.25 SPRAY PADS AND INTERACTIVE FOUNTAINS:

- **A.** The spray pad shall be equipped, at its lowest point, with an unvalved drain of sufficient capacity and designed to prevent the accumulation of water.
- **B.** If the spray pad uses recirculated water, then filtration and disinfectant feed systems shall be provided as required by this regulation.
- (1) The time taken to completely recirculate and filter the entire volume of water in the system once shall be no greater than thirty minutes.
 - (2) A disinfection residual shall be maintained as specified in 7.18.4.11 NMAC, Pool Water Quality.
- **C.** spray pads that do not recirculate water are exempt from the requirements for bathhouses and toilet facilities in the swimming pool rules.
- **D.** Surfaces within the spray pad or interactive fountains and adjacent decks shall be watertight, slip resistant, and withstand design stresses.

[7.18.3.25 NMAC - Rp, 7.18.3.25 NMAC, 07/30/08]

7.18.3.26 ACTIVITY POOLS:

- **A.** Water play structures used in activity pools shall be designed and maintained so that their surfaces are smooth, nontoxic and easily cleanable.
- **B.** The devices shall not pose a safety or health hazard to users and shall not interfere with the circulation or disinfectant levels of the water.
- **C.** Activity pools shall meet all the appropriate design, construction, operation and maintenance requirements of a public pool.

[7.18.3.26 NMAC - Rp, 7.18.3.26 NMAC, 07/30/08]

7.18.3.27 **WAVE POOLS:**

- **A.** The generation of waves more than three feet in height in a wave pool, regardless of pool depth, shall not continue for more than fifteen minutes at a time.
- **B.** The wave pool shall not be used if the main drain is not clearly visible from the deck with the wave generating equipment turned off.
 - **C.** Bathers shall gain access to the wave pool at the shallow or beach end only.
- (1) The side deck areas of the pool shall be enclosed by a fence or other comparable barrier accessible to authorized personnel only.
 - (2) A sign shall be posted indicating that this area is not open to the public.
- **D.** Properly sized U.S. Coast Guard approved life jackets shall be provided free for use by bathers who request them.
- **E.** Each pool attendant and lifeguard station shall have a clearly labeled and readily accessible emergency shut-off switch for the control of the wave action system.
 - **F.** An audible warning system shall be provided to alert bathers at the beginning of wave generation.
- **G.** Recessed steps and handrails shall be provided at one or more locations along the wall of the wave pool.
- (1) The recessed steps and handrails shall extend down the wall so they will be accessible during wave generation at the lowest water level.
- (2) The distance between the handrail and the wall shall not be more than five inches or less than three inches.

[7.18.3.27 NMAC - Rp, 7.18.3.27 NMAC, 07/30/08]

7.18.3.28 WATERCOURSE RIDES:

- **A.** Handrails, steps, stairs and booster inlets for watercourse rides shall not protrude into the watercourse.
 - **B.** The watercourse shall be no less than eight feet wide or more than three and one half feet deep.

- **C.** A department approved method of exit shall be provided not less than every two hundred feet along the watercourse.
- **D.** A deck shall be provided along at least one side of the watercourse. [7.18.3.28 NMAC Rp, 7.18.3.28 NMAC, 07/30/08]

7.18.3.29 WADING POOLS:

- **A.** A wading pool shall have:
 - (1) a maximum water depth of twenty four inches;
 - (2) a slope which does not exceed one foot in 12 feet;
 - (3) a slip-resistant finish;
- (4) a maximum turnover time as specified in Subsection B of 7.18.3.37 NMAC, Circulation System, in this rule;
- (5) a separate pool with an independent circulation system and physically separated from any other pool; and
 - (6) at least two inlets.
- **B.** Adequate sanitary facilities shall be available in the vicinity of the wading pool, as required in 7.18.3.49 NMAC, Bathhouse and Toilet Facilities, in this rule. [7.18.3.29 NMAC Rp, 7.18.3.29 NMAC, 07/30/08]

7.18.3.30 PUBLIC BATHS:

- **A.** Public baths shall only be of the fill-and-draw or flow-through type.
- **B.** Public baths shall meet all of the requirements for construction, operation, and maintenance of the public bath as specified in this rule, 7.18.2 NMAC, and 7.18.4 NMAC, except:
- (1) A fill-and-draw public bath shall be exclusively for one use at a time, after which the bath shall be completely drained, cleaned, and disinfected prior to the next use.
- (2) Flow-through public baths will be exempt from the requirements for recirculation, filtration and disinfection if the flow rate of water through the bath from natural or developed sources completely replaces the entire bath water volume every thirty minutes or less. Hot springs public baths shall be exempt from the requirements for recirculation, filtration and disinfection provided they comply with the water quality requirements in Subsection N and O of 7.18.4.11 NMAC.

[7.18.3.30 NMAC - Rp, 7.18.3.30 NMAC 07/30/08]

7.18.3.31 ELEVATED LIFEGUARD CHAIRS:

- **A.** Each public pool where lifeguards are required shall have at least one elevated lifeguard chair.
- **B.** There shall be one lifeguard chair for each lifeguard required with the exception of the lifeguard located at waterslide exits and wading pools.
- C. Where more than one lifeguard chair or elevated lifeguard platform is required, there shall be a chair or platform located on each side of the pool. When there is a diving tank connected to a pool (ZLT) where the pool has more than two thousand five hundred square feet, department approval is required.
- **D.** Lifeguard chairs shall be located to provide a clear, unobstructed view of the bottom of the pool within a field of view no greater than ninety degrees on either side of a line of sight extending straight out from the platform or lifeguard chair.
- **E.** Portable lifeguard chairs or elevated lifeguard platforms shall be acceptable providing they are structurally sound and tilt or tip proof.
- **F.** Lifeguard chairs to at least six feet in height from the deck surface to the chair seat shall be located in the diving area and where the water depth is five feet or greater. Height is specified due to refraction angle of the water.
- **G.** A pool that has a diving board shall have at least one elevated lifeguard chair located to provide a clear unobstructed view of the pool bottom in the diving area. The seat of the lifeguard chair in the diving area shall be located at an elevation of at least six feet above the pool deck.
- **H.** Elevated lifeguard platforms located in the shallow area where the water is less than five feet in depth shall be at least thirty-four inches in height from the deck surface to the platform surface. The department may approve other configurations if visibility problems occur. [7.18.3.31 NMAC Rp, 7.18.3.31 NMAC, 07/30/08]

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- **7.18.3.32 EMERGENCY TELEPHONE:** An emergency telephone shall be located in any of the following areas:
 - **A.** within the public pool enclosure that is accessible at all times;
- **B.** in another location approved, in writing, by the department. [7.18.3.32 NMAC Rp, 7.18.3.32 NMAC, 07/30/08]

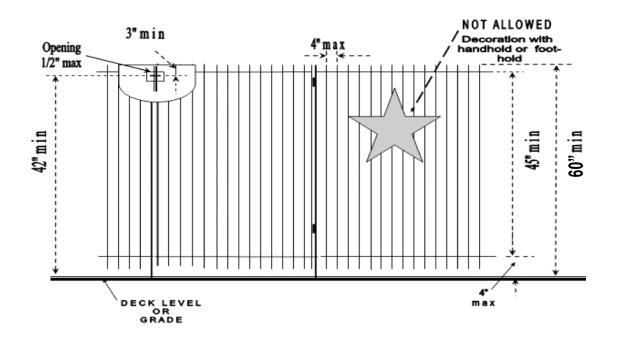
7.18.3.33 PUBLIC POOL BARRIER:

- **A.** For all newly constructed and modified public pools and baths, and where the barrier is being replaced, the provisions of Subsections B through K of this section shall apply. For public pools constructed prior to effective date of the pool rules' and where the barrier has not been replaced, the provisions of Subsection L of this section shall apply.
- **B.** Public pools and baths shall be completely enclosed by a barrier that is durable, stable, and of firm construction to control access to the public pool and not provide a framework for climbing or scaling.
- C. Unless otherwise prohibited by the fire code or the local fire marshal, barriers, including windows, gates, and doors, shall be constructed in such a manner so as to control access to the pool. Barriers that serve as emergency exits shall have an audible alarm.
- **D.** The top of the barrier shall be not less than five feet above grade as measured from the exterior side of the enclosure or barrier at a point three feet perpendicular from the base at any given point along the enclosure. A clear span five feet in radius as measured from the top of the fence is required, as specified in Subsection C of 7.18.3.34 NMAC, Barrier clearance requirements.
- **E.** The bottom horizontal rail or bar of the enclosure or barrier shall be no more than four inches above the grade when the grade is a solid surface, such as a concrete deck or two inches when the grade is any other surface, as specified in Subsection A of 7.18.3.34 NMAC, Barrier detail.
 - **F.** The separation between vertical sections and bars shall be no wider than four inches.
- **G.** There shall be forty five inch minimum separation between the bottom horizontal members or rails and any other horizontal member or rail of the mid section of the pool enclosure.
- **H.** A barrier shall not have decorative portions that provide handholds or footholds. All exterior projections or recessions shall be forty-five inches from the bottom of the fence, as specified in Subsection A, Barrier detail, of 7.18.3.34 NMAC.
- I. Chain link enclosures or barrier's mesh size shall not exceed one and one fourth inches square, unless slats, fastened at the top and bottom of the fence, or other department approved measures, are used to reduce mesh openings to not allow the passage of a one and three-quarters inch-diameter sphere. Chain link fencing shall not be less than eleven gage, as specified in Subsection B of 7.18.3.34 NMAC.
- **J.** Gates and doors in public pool enclosures or barriers shall open outward away from the pool, be self-closing and equipped with a self-latching device lockable from the exterior side of the enclosure or barrier. Except as provided in 7.18.4.21 NMAC, barrier gates and doors shall not be blocked open or otherwise disabled to prevent closing and latching.
- (1) The operating controls for the self-latching device shall be located at least forty-two inches above the exterior ground surface or pool deck. Latches that remain continuously locked and can only be opened by the use of a key or other access control system shall be of a height that allows the barrier, fence and latch to be in compliance with accessibility standards, and applicable regulations.
- (2) An eighteen inch radius of solid material around the self-latching device or a similar barrier with openings no greater than one-half inch shall be provided.
- (3) Where a kick plate is required to meet accessibility standards, such gate or door shall have a solid facing at least forty-two inches from the bottom of the gate.
- **K.** Gates, doors or fire exits shall not open directly into a public pool enclosure from a living unit, hotel, motel room, or other public building unless otherwise required by the fire code or the local fire marshal. For spas or baths that are associated with a specific guest or motel room, the owners of the facility shall ensure compliance with the barrier requirements.
- L. Public pools and baths that existed prior to the effective date of the pool rules and that have not been modified shall have a barrier with a minimum height of four feet. Barriers not meeting this requirement shall be replaced in accordance with the provisions of Subsections B through K of this section.

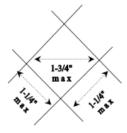
 [7.18.3.33 NMAC Rp, 7.18.3.33 NMAC, 07/30/08]

7.18.3.34 POOL BARRIER DIMENSIONS AND REQUIREMENTS:

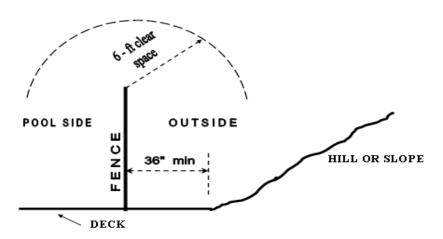
A. Barrier detail:



B. Chain link fence detail:



C. Barrier clearance requirements:



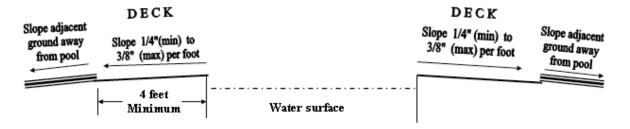
[7.18.3.34 NMAC - Rp, 7.18.3.34 NMAC, 07/30/08]

7.18.3.35 **DECKS**:

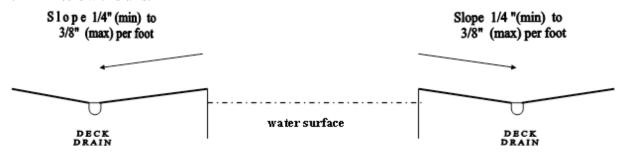
- A. All public pools and hot springs public baths constructed or modified after the effective date of the pool rules shall have a continuous, unobstructed deck that is at one level, excluding the slope for drainage, and of at least four feet width surrounding the pool. The deck width may include the coping.
- **B.** Exception: on spas with a diameter, length or width of less than twelve feet, a continuous deck, that is no less than four feet wide, shall be provided around at least fifty percent of a spa. Egress may only be permitted on to the deck.
- **C.** Decks around rockeries and waterfalls shall conform to specifications stated in 7.18.3.16 NMAC of this rule.
- **D.** All public pools constructed after the effective date of these rules shall have a deck that is no less than four feet wide behind diving equipment, slides, lifeguard chairs or starting platforms.
- **E**. Decks shall slope from one-fourth inch per foot to a maximum of three-eighths inch per foot and shall be drained to the perimeter area or area drains.
- **F.** Outdoor pools decks may drain to landscaping in a manner that will not create muddy, hazardous or unsanitary conditions.
- **G.** Indoor pools shall use properly plumbed deck drains that drain to an approved receptor by means of an indirect connection.
- **H.** Drainage shall remove pool and spa splash water, deck cleaning water and rainwater without leaving standing water.
- **I.** The surface of the deck shall not drain into the pool or the overflow gutter and shall not be returned to the recirculation system.
- **J.** Site drainage shall be provided to direct all perimeter deck drainage, as well as general site and roof drainage, away from the pool. When required, yard drains shall be installed to prevent the accumulation of water around the pool area.
- **K.** Except for trench type drainage systems, deck drains shall be spaced or arranged so that not more than two hundred square feet of area is tributary to each drain and drains shall not be more than twenty-five feet apart.
 - **L.** Runway drains shall not be interconnected with overflow system drain lines.
- **M.** Deck surfaces shall be constructed of concrete, non-slip tile, or other impervious material with a slip-resistant, easily cleanable surface.
- **N.** For all public pools and hot springs public baths constructed or modified after the effective date of these rules wooden surfaces, carpeting or artificial turf surfaces are prohibited on the deck or within the limits of the deck drainage area, whichever is greater. No person shall modify a deck at a public pool or hot springs public bath, which was constructed prior to the effective date of these rules, and install wooden, carpeting or artificial turf surfaces on the deck, or within the limits of the deck drainage area, whichever is greater.
- **O.** Joints between concrete deck slabs shall be effectively sealed and shall be designed to protect the pool, coping and its mortar bed from movement of the deck.
- **P.** New or replacement expansion joints installed after the effective date of the pool rules' shall not be constructed of wood.
- Q. Adjoining deck surface elevations shall vary no more than one-fourth inch. [7.18.3.35 NMAC Rp, 7.18.3.35 NMAC, 07/30/08]

7.18.3.36 DECK AND DECK DRAIN REQUIREMENTS:

A. Deck without deck drains:



B. Decks with drains:



[7.18.3.36 NMAC - Rp, 7.18.3.36 NMAC, 07/30/08]

7.18.3.37 CIRCULATION SYSTEM:

A. Except for hot springs public baths and fill and draw public baths, all public pools, shall have circulation and filtration systems with piping, pumps, filters, disinfection and other equipment to maintain uniform disinfection levels and pool water quality in all parts of the pool as required by this regulation and other applicable provisions of the pool rules. The circulation system for public baths shall meet the applicable requirements of 7.18.3.30 NMAC of this rule.

B. The system of pumps, filters, disinfection facilities and other equipment shall be of adequate size to meet the following maximum turnover rate:

- (1) wave pools/watercourse ride six hours;
- (2) wading pools one hour;
- (3) waterpark slide pools one hour;
- (4) all other special use pools thirty minutes;
- (5) spas, thirty minutes;
- (6) class D pools four hours; and
- (7) all other public pools six hours.
- C. Any circulation system installed in accordance with pool rules in effect at the time of original construction or modification and which does not meet the turnover rates in Subsection B of 7.18.3.37 NMAC, may continue in use, until the pool is modified. However, the continued use of the existing recirculation system is contingent upon the recirculation system complying with all standards of disinfection and water clarity in the swimming pool rules. Non-compliant recirculation systems shall be replaced or brought into compliance.
- **D.** The circulation system at all public pools, except for fill-and-draw baths, shall have flow rate meter(s) or device(s), installed, operated, and maintained in accordance with manufacturers' directions to measure all necessary flow rates as indicated by this regulation and other applicable provisions of the pool rules.
- **E.** Each public pool shall have its own circulation system that is not connected to any other pool. [7.18.3.37 NMAC Rp, 7.18.3.37 NMAC, 07/30/08]

7.18.3.38 SURFACE SKIMMING AND PERIMETER OVERFLOW GUTTER SYSTEMS:

- A. Surface skimmers or perimeter overflow gutter systems shall be provided at all public pools. Such systems shall be designed and constructed to skim the surface of the pool or spa water when the water level is maintained within the operating water level range of the system's rim or weir device.
 - **B.** Where skimmers are provided the following provisions will apply.
 - (1) All skimmers installed in a public pool shall be NSF/ANSI 50 certified.
- (2) Each skimmer shall be equipped with a strainer basket and a self-adjusting skimmer weir device that shall operate freely with continuous action to variations in water level over a range of at least three inches.
- (3) Skimmers shall be designed for a flow-through rate of not less than thirty gallons per minute and the total capacity of all skimmers in any pool shall be at least eighty percent of the required filter flow of the recirculation system.
- (4) Each skimmer shall be equipped with a self-activating equalizer line, a flow control device, and an anti-entrapment plate. This subsection shall only apply to public pools constructed or modified after the effective date of the pool rules.
- (5) Skimmers shall be located to achieve effective skimming action over the entire surface area of the pool.

- (6) Skimmer covers located on a walking surface shall be securely seated, slip-resistant, of sufficient strength to withstand normal deck use, and not constitute a tripping or safety hazard.
- (7) Where skimmers are used, there shall be one skimmer for each five hundred square feet of surface area, with a minimum of two skimmers. One skimmer shall be provided for each one hundred fifty square feet of spa or wading pool water surface area, or fraction thereof.
- (8) The operating water level for surface skimmers shall be within the vertical operating range of the skimmers.
 - C. Where perimeter overflow gutter systems are used the following provisions will apply.
 - (1) Perimeter overflow gutter systems shall be provided around the entire perimeter of public pools.
- (2) Perimeter overflow gutter system drains shall not exceed fifteen feet on centers. The perimeter overflow gutter bottom shall be sloped one-fourth inch per foot to the drainage outlets.
- (3) The perimeter overflow gutter system outlets shall be covered with department-approved drain grates.
- (4) The perimeter overflow gutter system shall be capable of continuously removing fifty percent or more of the recirculated water and returning it to the filter.
- (5) Water from the perimeter overflow gutter systems shall recirculate through the filter or, in cases of pools installed prior to the effective date of this regulation, water may be discharged into the sewer. If water is discharged to a sewer, there shall be a minimum eight-inch air gap or a department-approved back-siphonage and backflow prevention device between the perimeter gutter overflow system drain line and the top rim of the approved receptacle. Enclosed pipeless gutters shall have clean-out covers at a maximum of fifteen-foot intervals and shall have a slope of not less than one-eighth inch per foot.
- (6) Public pools with perimeter overflow gutter systems shall have surge tanks unless designed to use inpool surge.
- (7) Perimeter overflow gutter systems shall be connected to the recirculation system with a system surge capacity of at least one gallon per square foot of pool surface.
- (a) External surge systems shall be capable of transferring water at a rate equal to one hundred percent of the pool's design flow rate.
 - **(b)** Perimeter overflow gutter systems shall drain in two minutes or less after sudden flooding.
- (8) The operating water level for perimeter overflow gutter systems shall be over the overflow gutter lip at all times.

[7.18.3.38 NMAC - Rp, 7.18.3.38 NMAC, 07/30/08]

7.18.3.39 INLETS AND OUTLETS:

- **A.** Pool inlets and outlets shall be sized and arranged to produce a uniform circulation of water to maintain a uniform level of disinfectant residual throughout the pool.
 - **B.** Inlets shall not protrude from the public pool floor or wall to create a hazard.
 - **C.** Grates shall be designed to prevent entrapment of fingers and other body parts.
- **D.** All outlet grates, anti-entrapment plates, and inlet fittings shall have tamper-proof screws that cannot be removed except with tools.
- **E.** There shall be at least one inlet per five hundred square feet of pool surface area or per fifteen thousand gallons of water, whichever results in the greater number of inlets.
- **F.** All inlets shall be adjustable to obtain the desired rate and direction of water flow. If the distance across any portion of the public pool is more than thirty feet, multiple inlets shall be provided on opposite ends.
 - **G.** Inlets from the recirculation system shall be submerged at least twelve inches below water level.
- **H.** If the pool width is greater than twenty-five feet, multiple outlets shall be provided. Multiple outlets shall be spaced not more than twenty feet apart or more than ten feet from side walls, and shall be located to provide uniform withdrawal of water from the deepest part of the pool.
- **I.** The total velocity through outlet grate openings shall not exceed one and one-half feet per second. The total velocity through anti-entrapment suction outlet covers shall not exceed six feet per second.
 - J. Vacuum outlets on public pools shall be self-closing.
 - **K.** Pool outlets shall be valved and connected to the recirculation pump.
- **L.** Pool outlets shall have a design capacity equal to one hundred percent of the recirculation pump capacity.
- **M.** All pools shall have, at the lowest point of the pool floor to drain the entire floor area, either a minimum of two hydraulically balanced suction outlet openings at least three feet apart with anti-entrapment covers or grates with a minimum surface area of one hundred forty-four square inches per pool pump suction line.

- **N.** The system shall be designed such that the outlets are at least three feet apart and so that neither one of the two outlets can be cut out of the suction line by a valve or other means which would allow entrapment of the bather on any suction outlet opening.
- O. All suction outlets, including covers, plates, fittings, hardware, shall be designed to prevent entrapment in accordance with Section 11, ANSI/NSPI-1 2003.

 [7.18.3.39 NMAC Rp, 7.18.3.39 NMAC, 07/30/08]

7.18.3.40 POOL FILL SPOUTS AND INLETS: For pool fill spouts and inlets the following shall apply. Over-the-rim fill spouts.

- (1) Over-the rim fill spouts shall have an air gap or other equivalent means approved by the department or local municipal plumbing authority, above the pool deck, a minimum of six inches or two times the diameter of the pipe, whichever is greater.
 - (2) Over-the-rim fill spouts shall be located under a diving board, hand rail or beside grab rails.
- **B.** Through-the-wall fill lines shall be located above the water level and equipped with a department-approved back-siphonage and backflow prevention device installed on the potable water supply for cross-connection prevention and control.
- C. If directly connected to the pool's circulation system, a department-approved back-siphonage and backflow prevention device, for the purpose of cross-connection prevention and control, shall be installed on the potable water supply before it connects to the pool recirculation piping.

 [7.18.3.40 NMAC Rp, 7.18.3.40 NMAC, 07/30/08]

7.18.3.41 **PIPING**:

- **A.** Pool circulation piping shall be sized to permit the rated flows for filtering and cleaning without exceeding the operating head of the pump.
- **B.** All public pools constructed after the effective date of the pool rules' and where the piping is being replaced, plastic piping, if installed, shall be non-toxic and certified by NSF/ANSI 14.
- C. Public pool or spa backwash or drain lines shall be permanently piped with an air gap, equivalent to two times the pipe diameter, but in no case less than eight inches above the flood level of the approved receptor.
- (1) All of the plumbing drains serving the pool sewer system shall discharge into the sanitary sewer system or other department approved disposal method.
- (2) Unless otherwise waived in writing by the county or municipal plumbing authority, or the operator of the sewer system, all discharges to the sanitary sewer from any public pool or ancillary facility shall be equipped with a two-chamber sand interceptor meeting the requirements set forth in the current appropriate code adopted by the department, the New Mexico construction industries division, the county or municipal plumbing authority, or the operator of the sewer system.
- **D.** Exposed piping shall be properly and permanently labeled to easily and adequately identify the piping function and direction of flow to the operator.
- **E.** Pool piping subject to damage by freezing shall have a uniform slope in one direction and shall be equipped with valves for adequate drainage or shall be capable of evacuating water to prevent freezing and possible damage.
- **F.** Piping and equipment shall be designed, fabricated, and installed to drain the pool water from the equipment, together with exposed face piping, by removal of drain plugs and manipulating valves, or by other methods.

[7.18.3.41 NMAC - Rp, 7.18.3.41 NMAC, 07/30/08]

7.18.3.42 **PUMPS**:

- **A.** A pump and motor shall be provided for circulation of public pool water, except for fill and draw public baths and flow through public baths that meet the requirements of Paragraph (2) of Subsection B of 7.18.3.30 NMAC of this rule.
 - **B.** All pumps shall have a strainer on the suction side of the pump.
 - (1) Strainers installed below water level shall have a valve on each side to facilitate cleaning.
 - (2) The strainer inlet shall be at least equal in size to the pump suction line.
- C. Performance of pumps shall meet the conditions of flow required for filtering and backwashing the filters against the TDH developed by the complete system. Pumps shall be capable of providing design flow rates to match the TDH.

D. Public pool pumps shall be NSF/ANSI 50 certified.

E. Pumps shall be sized to meet flow requirements, under soiled (dirty) filter conditions as specified in 7.18.3.37 NMAC, of this rule, for filtering the public pool water in accordance with 7.18.3.37 NMAC and filter cleaning (if applicable) against the total dynamic head developed by the complete system. Pumps shall also be sized to create pressures or vacuums necessary to meet the manufacturer's recommendations for filter cleaning. [7.18.3.42 NMAC - Rp, 7.18.3.42 NMAC, 07/30/08]

7.18.3.43 FILTERS:

- **A.** Filters shall be sized to accommodate or exceed the design flow rate of the system and be capable of maintaining pool water clarity under conditions of maximum bather load as described in Paragraph (9) of Subsection A of 7.18.4.11 NMAC, Pool Water Quality.
- **B.** Filters for public pools shall be backwashed, cleaned, operated, installed, operated, maintained, and replaced per the schedules, instructions and frequency provided by the manufacturer.
 - **C.** The filtration rate shall not exceed the following:
- (1) high rate sand filters twenty gallons per minute per square foot of filter media or that rate approved by the manufacturer for that particular filter, whichever is less;
 - (2) rapid sand filters three gallons per minute per square foot of filter media;
- (3) diatomaceous earth filters two gallons per minute per square foot of filter media for pools, one and one half gallons per minute per square foot of filter media for spas; or
 - (4) cartridge filters .375 gallons per minute per square foot of effective filter area.
 - **D.** Adequate means to release air from the filter tank shall be provided.
- **E.** Filter components, which require servicing, shall be accessible and available for inspection and repair.
 - **F.** Filters shall be designed so that filtration surfaces can be easily inspected and serviced.
 - **G.** Filters shall be NSF/ANSI 50 certified.

[7.18.3.43 NMAC - Rp, 7.18.3.43 NMAC, 07/30/08]

7.18.3.44 POOL HEATERS: All public pool heaters and energy sources shall be designed, constructed and operated to comply with applicable local, state or federal codes and standards as well as the manufacturer's specifications.

[7.18.3.44 NMAC - Rp, 7.18.3.44 NMAC, 07/30/08]

7.18.3.45 DISINFECTANT AND CHEMICAL FEEDERS:

- **A.** Automatic disinfection of public pools shall be provided and shall maintain a disinfecting residual in the pool waters at all times, except for fill and draw public baths and flow through public baths that meet the requirements of Paragraph (2) of Subsection B of 7.18.3.30 NMAC of this rule. The requirements of 7.18.3.45 NMAC shall not apply to hot springs public baths.
- **B.** Hand dosing of disinfectant or the introduction of disinfectant into the public pool through the skimmers or the main drain is prohibited.
- C. The disinfection agent for public pools shall be registered for such use by the U.S. environmental protection agency and shall be capable of being tested by a test kit.
- **D.** Automatic disinfection equipment shall have controls capable of fine feed rate adjustment, and a graduated and clearly marked dosage adjustment.
 - **E.** For public pools, disinfection equipment shall:
- (1) be capable of feeding at least one pound equivalent chlorine per fifteen thousand gallons of pool capacity per twenty-four hours; or,
- (2) be capable of feeding at least two and one fourth pounds of bromine per fifteen thousand gallons of pool capacity per twenty-four hours where bromine sanitation is applicable.
- **F.** Hypochlorinators, erosion (flow-through) feeders, or other adjustable output rate disinfectant feeding equipment shall be NSF/ANSI 50 certified.
- **G.** All public spa pools and wading pools shall be equipped with oxidation-reduction potential (ORP) automatic disinfection and pH controllers.
 - **H.** Where chlorine gas is used as the disinfectant, the following shall apply.
- (1) The chemical feeders, other containers, and related equipment shall be housed in a room or compartment separate from other pool equipment; such room or compartment shall:
 - (a) be at or above ground level;

- **(b)** have a door that opens to the outside of the building in the room or compartment where the chlorine gas is stored; the door shall open away from the public access area;
- (c) be located so that chlorine gas, if accidentally released, will not flow into the pool area or into building ventilation systems;
- (d) have lighting and ventilation switches located outside the enclosure, adjacent to the door, or the door shall be equipped with a switch that automatically activates the mechanical ventilation and lighting systems;
- (e) have adequate ventilation to outside fresh air with at least four (4) complete air changes per minute; and
 - (f) have a platform scale for measuring the weight of the chlorine cylinders.
- (2) The certified operator shall use a full face negative pressure respirator with a chlorine cartridge approved by the national institute of occupational safety and health (NIOSH) for protection against chlorine gas; or a self-contained breathing apparatus approved by the NIOSH shall be supplied, kept in good working condition and mounted outside the chlorine enclosure.
 - (3) Gas chlorinators shall have a fail-safe mechanism that ceases chlorination in case of malfunction.
 - (4) Gas chlorinators shall be equipped with an anti-siphon chlorine injection device.
- (5) The vent line from the gas chlorinator shall vent away from occupied areas; the exterior vent line shall be screened.
 - (6) Pools shall have appropriate equipment for maintaining required pH levels.
 - **I.** Where disinfectants other than chlorine or bromine are used, such disinfectants shall:
- (1) achieve water disinfection equal to that provided by free chlorine or bromine at the concentration specified in 7.18.4.10 NMAC; the burden for demonstrating that the proposed alternative is equal to or better than chlorine or bromine is upon the proponent of the alternative disinfectant method; and
- (2) be approved in writing by the department; the approval may place special requirements and conditions on its use;
- (3) ozone and ultraviolet disinfection may be used as an alternative or a supplemental disinfection system as approved under this subsection by the department.

 [7.18.3.45 NMAC Rp, 7.18.3.45 NMAC, 07/30/08]

7.18.3.46 AIR INDUCTION SYSTEMS:

- **A.** Air induction systems shall only be allowed in spa pools.
- **B.** Air induction systems shall be designed to prevent electrical shock hazards.
- **C.** Air intake sources shall be positioned and designed to minimize contaminants, such as deck water or dirt, from entering the spa pool.
- **D.** Air induction systems shall have a timer-controlled operation and shall be limited to a maximum of fifteen minutes. Air induction system controls shall be located a minimum of six feet horizontally from the edge of the spa pool.
- **E.** Air induction systems shall be completely separate from the spa pool circulation system. [7.18.3.46 NMAC Rp, 7.18.3.46 NMAC, 07/30/08]

7.18.3.47 METERS AND GAUGES:

- **A.** Flow rate meters or gauges shall be installed, operated, and maintained in good working condition in all circulation systems and flow-through public baths. Such meters shall:
 - (1) measure the flow in gallons per minute;
 - (2) be mounted as recommended by the manufacturer;
 - (3) be located to be easily read; and
 - (4) calibrated per the procedures and at the frequency specified by the manufacturer.
- **B.** Pressure gauges or vacuum gauges shall be installed on all public pools so that pressure or vacuum readings, appropriate to filter type, may be obtained on both the filter inlet and outlet lines. [7.18.3.47 NMAC Rp, 7.18.3.47 NMAC, 07/30/08]

7.18.3.48 EQUIPMENT ENCLOSURE:

- **A.** New pool construction, beginning with the effective date of this regulation, shall have an equipment enclosure with a minimum of fifty square feet of floor area and a minimum of three feet of unobstructed access to operational, informational and maintenance portions of the equipment.
 - **B.** Equipment enclosures shall be adequately ventilated.

- **C.** Equipment enclosures shall protect the equipment and be locked, permitting access only to authorized personnel.
 - **D.** Equipment enclosures shall have adequate drainage.
 - **E.** Equipment enclosures shall be lighted to properly operate and maintain equipment.
- **F.** All electrical lights, fixtures, outlets, and other equipment shall be in compliance with applicable electrical codes.

[7.18.3.48 NMAC - Rp, 7.18.3.48 NMAC, 07/30/08]

7.18.3.49 BATHHOUSE AND TOILET FACILITIES:

- **A.** A bathhouse shall be provided at all class A public pools, and maintained in good working order and sanitary condition at all times.
- **B.** For the purposes of calculating the required number of toilet facilities, showers, and lavatories to meet the requirements in this section the bather load shall be composed of fifty percent of each sex unless otherwise approved by the department.
- C. Where a class A public pool is operated in conjunction with a companion facility, such as a recreation facility, a bathhouse common to both facilities is allowed, provided the minimum facility ratios and locations described in Subsections D, E, and F of this section are followed.
 - **D.** Bathhouses shall:
- (1) be located within a maximum travel distance of two hundred feet of the class A public pool or the maximum travel distance specified in the international building code, whichever is more stringent;
 - (2) have floors that are slip resistant, easily cleanable, and coved to a height of four inches;
 - (3) have interior wall and ceiling finishes that are smooth, easily cleanable, and impervious to water;
 - (4) have hose bibs for washing down the bathhouse interior;
 - (5) have floors with a minimum slope of one-fourth inch per foot that drain to floor drains;
- (6) have ventilation to minimize condensation and odors with a minimum of two air changes per hour; and
- (7) have shower rooms or stalls with walls that are impervious to water to a height of six feet above the floor; shower rooms and stalls shall comply with the following requirements:
- (a) shower rooms and stalls shall have an effective water tight joint between the wall and the floor;
 - **(b)** shower stalls shall have doors or curtains for each compartment;
 - (c) glass bath or shower doors shall be made of safety glass;
 - (d) wooden racks or duck boards over shower floors are prohibited;
 - (e) rubber or waterproof mats shall be cleaned and dried daily; and
 - (f) shower stall floors shall be finished with non-slip, impervious surfaces.
- **E.** Class A public pools shall provide toilet facilities in the following numbers based upon maximum pool bather load:
 - (1) women, one per forty bathers or fraction thereof, with a minimum of two;
- (2) men, one per seventy five bathers or fraction thereof, with a minimum of two (urinals shall be an acceptable substitute for no more than one-half of the toilets); and
- (3) lavatories adjacent to toilets, one per two hundred bathers or fraction thereof, with a minimum of two.
- **F.** Class A public pools shall provide one showerhead per forty pool users or fraction thereof, with a minimum of two.
 - **G.** Hot and cold or tempered water only shall be provided at all showerheads.
 - **H.** Soap shall be provided at all showerheads and lavatories.
- **I.** If the bathhouse at any public pool is modified or newly constructed, it shall come into compliance with the current requirements of the pool rules.
- **J.** Beginning with the effective date of this regulation, all new construction of class B pools or modified class B pools shall:
 - (1) provide toilets and lavatories based upon maximum bather load:
 - (a) women, one per forty pool users or fraction thereof, with a minimum of one;
- **(b)** men, one per seventy five pool users or fraction thereof, with a minimum of one (urinals shall be an acceptable substitute for no more than one-half of the toilets); and
 - (2) provide such toilets and lavatories within five hundred feet of the public pool.

- **K.** When all private accommodations or living units are located within a travel distance of five hundred feet of a class B public pool, it shall constitute compliance with the requirements of Paragraphs (1) and (2) of this subsection.
- L. When provided, additional bathhouse facilities adjacent to the pool shall comply with the requirements of Paragraphs (2) through (7) of Subsection D of 7.18.3.49 NMAC and shall comply with the fixture requirements of Subparagraphs (a) and (b) of Paragraph (1) of Subsection J of 7.18.3.49 NMAC. [7.18.3.49 NMAC Rp, 7.18.3.49 NMAC, 07/30/08]
- **7.18.3.50 VISITOR AND SPECTATOR AREAS:** Visitors and spectators shall be allowed within the pool room or pool enclosure if they are restricted to a separate area not used by bathers during competition or demonstration events.

[7.18.3.50 NMAC - Rp, 7.18.3.50 NMAC, 07/30/08]

7.18.3.51 FOOD SERVICE:

- **A.** Glass and rigid plastic containers are prohibited within the pool enclosure, except during competitive swimming events and practice sessions for such events, where water bottles without removable lids may be used to provide drinking water to participants.
- **B.** Food and drink shall be permitted in the visitor and spectator areas or in separated snack areas for pool users.
- C. Trash containers shall be provided in the food service areas. [7.18.3.51 NMAC Rp, 7.18.3.51 NMAC, 07/30/08]
- **7.18.3.52 DRINKING FOUNTAINS:** Drinking fountains shall be provided at all class A public pools. [7.18.3.52 NMAC Rp, 7.18.3.52 NMAC, 07/30/08]

7.18.3.53 RIGHT OF ENTRY:

- **A.** Upon presentation of credentials, department representatives may enter any premises where a public pool is located or where records required by the public swimming pool rules are located during the public pool's operating hours.
 - **B.** When entry is denied by the property owner, the department may seek a district court order to:
- (1) have a right of entry to, upon, or through any premises where a permitted or unpermitted public pool is located;
- (2) have a right of entry on any premises where any records that are required by the public swimming pool rules or permit conditions are kept;
- (3) have access to and copy any record that the public swimming pool rules or permit requires the facility to maintain;
- (4) inspect any premises or equipment to determine compliance with the public swimming pool rules or any permit condition; and
- (5) obtain any sample(s) required to determine compliance with the public swimming pool rules or any permit condition.

[7.18.3.53 NMAC - Rp, 7.18.3.53 NMAC, 07/30/08]

7.18.3.54 to 7.18.3.200 [RESERVED]

- **7.18.3.201 CONSTRUCTION:** This part shall be liberally construed to carry out its purpose. [7.18.3.201 NMAC Rp, 7.18.3.201 NMAC, 07/30/08]
- **7.18.3.202 SEVERABILITY:** If any provision of application of this part is held invalid, the remainder of this part, or any other application, shall not be affected.

 [7.18.3.202 NMAC Rp, 7.18.3.202 NMAC, 07/30/08]
- **7.18.3.203 REFERENCES IN OTHER REGULATIONS:** Any reference to the public swimming pool regulations or to any prior version of the public swimming pool regulations in any other rule shall be construed as a reference to this rule. References to the "public swimming pool rules" in this part refer to all provisions contained in 7.18.2 through 7.18.5 NMAC.

[7.18.3.203 NMAC - Rp, 7.18.3.203 NMAC, 07/30/08]

- **7.18.3.204 SAVINGS CLAUSE:** Repeal or supersession of prior versions of this part or the public swimming pool rules shall not affect any administrative or judicial action initiated under those prior versions. [7.18.3.204 NMAC Rp, 7.18.3.204 NMAC, 07/30/08]
- **7.18.3.205 COMPLIANCE WITH OTHER REGULATIONS:** Compliance with the public swimming pool rules or this part does not relieve a person from the responsibility to comply with any other applicable federal, state or local regulations.

[7.18.3.205 NMAC - Rp, 7.18.3.205 NMAC, 07/30/08]

7.18.3.206 PENALTY: Any person who violates any provisions of this rule shall be subject to the penalty provisions in NMSA 1978, Section 74-1-10 of the Environmental Improvement Act, in addition to any other penalties provided for in the public swimming pool rules. [7.18.3.206 NMAC - Rp, 7.18.3.206 NMAC, 07/30/08]

7.18.3.207 LIMITATION OF DEFENSE: The existence of a valid permit for the installation, modification or operation of a public pool shall not constitute a defense to a violation of any section of this rule, except the requirement for obtaining a permit.

[7.18.3.207 NMAC - Rp, 7.18.3.207, 07/30/08]

HISTORY OF 7.18.3 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed with the state records center and archives:

HSSD 72-2, Swimming Pool Regulations Governing the Sanitary Design, Equipment, Construction and Operation, filed 9/27/72.

EIB 74-2, Regulations Governing Public Baths and Public and Semi-Public Swimming Pools, filed 7/15/74. EIB 76-1, Regulations Governing Public Swimming Pools and Public Baths, filed 3/25/76.

History of Repealed Material: 7 NMAC 18.1, Public Swimming Pools and Public Baths (filed 10/27/1995) repealed 03/30/05.

7.18.3 NMAC, Public Swimming Pools, Spas and Baths: Design and Construction (filed 02/09/2005), repealed 07/30/08.

Other History:

EIB 76-1, Regulations Governing Public Swimming Pools And Public Baths (filed 3/25/76) was reformatted, renumbered and replaced by 7 NMAC 18.1, Public Swimming Pools and Public Baths, effective 11/30/1995. Portions of 7 NMAC 18.1, Public Swimming Pools and Public Baths (filed 10/27/1995) was replaced by 7.18.3 NMAC, Public Swimming Pools, Spas and Baths: Design and Construction, effective 03/30/05. 7.18.3 NMAC, Public Swimming Pools, Spas and Baths: Design and Construction (filed 2/09/05) was replaced by 7.18.3 NMAC, Public Swimming Pools, Spas and Baths: Design and Construction, effective 07/30/08.